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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,323	07/13/2006	Ian George Griffiths	GB920030030US1	4569

32329 7590 02/20/2008
IBM CORPORATION
INTELLECTUAL PROPERTY LAW
11400 BURNET ROAD
AUSTIN, TX 78758

EXAMINER

BROPHY, MATTHEW J

ART UNIT	PAPER NUMBER
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2191

MAIL DATE	DELIVERY MODE
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02/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/554,323

Applicant(s)

GRIFFITHS ET AL.

Examiner

MATTHEW J. BROPHY

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/24/2005
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 13, and 16-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The "computer program product" of these claims is interpreted to be directed to Computer Software *per se*. Computer Software *per se* is considered functional descriptive material and therefore non-statutory when not claimed in combination with sufficient structure to render the claim statutory. Please see MPEP §2106.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,966,702 Fresko et al. hereinafter Fresko.

Regarding Claim 1, Fresko teaches: A data processing method for creating an executable file by combining a plurality of run units, the method comprising the steps

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of reading a first run unit to be added to the executable file (**Column 9, Lines 15-17, "The method begins in step 400 with a set of arbitrary class files "S" (typically part of one application). In step 401, the pre-processor reads and parses each class in "S."");** locating a first data entity set to a first string value in the first run unit (**Column 9, Lines 17-21, "In step 402, the pre-processor examines the constant pool tables of each class to determine the set of class file constants (such as strings and numerics, as well as others specific to the class file format) that can be shared between classes in "S."");** matching the first data entity with a second data entity set to a second string value, the second data entity being from a second run unit previously added to the executable file (**Column 9, Lines 21-23, "A shared constant pool table is created in step 403, with all duplicate constants determined from step 402."");** and adding the first run unit to the executable file but without the first data entity (**Column 9, Lines 23-35, "In step 404, the pre-processor removes the duplicate, shared constants from the individual constant pool tables of each class.").**

Regarding Claim 7, Fresko teaches: A data processing apparatus for creating an executable file by combining a plurality of run units, the apparatus comprising: means for reading a first run unit to be added to the executable file (**Column 9, Lines 15-17, "The method begins in step 400 with a set of arbitrary class files "S" (typically part of one application). In step 401, the pre-processor reads and parses each class in "S."");** means for locating a first data entity set to a first string value in the first run unit (**Column 9, Lines 17-21, "In step 402, the pre-processor examines the**

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constant pool tables of each class to determine the set of class file constants (such as strings and numerics, as well as others specific to the class file format) that can be shared between classes in "S.""); means for matching the first data entity with a second data entity set to a second string value, the second data entity being from a second run unit previously added to the executable file **(Column 9, Lines 21-23, "A shared constant pool table is created in step 403, with all duplicate constants determined from step 402.");** and means for adding the first run unit to the executable file but without the first data entity **(Column 9, Lines 23-35, "In step 404, the pre-processor removes the duplicate, shared constants from the individual constant pool tables of each class.").**

Regarding Claim 13, Fresko teaches: A computer program product comprising instructions which, when executed on a data processing host, cause the data processing host to carry out a method for creating an executable file by combining a plurality of run units, the method comprising the steps of: reading a first run unit to be added to the executable file **(Column 9, Lines 15-17, "The method begins in step 400 with a set of arbitrary class files "S" (typically part of one application). In step 401, the pre-processor reads and parses each class in "S."");** locating a first data entity set to a first string value in the first run unit **(Column 9, Lines 17-21, "In step 402, the pre-processor examines the constant pool tables of each class to determine the set of class file constants (such as strings and numerics, as well as others specific to the class file format) that can be shared between classes in "S."");** matching the first data entity with a second data entity set to a second string

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value, the second data entity being from a second run unit previously added to the executable file (Column 9, Lines 21-23, "A shared constant pool table is created in step 403, with all duplicate constants determined from step 402."); and adding the first run unit to the executable file but without the first data entity (Column 9, Lines 23-35, "In step 404, the pre-processor removes the duplicate, shared constants from the individual constant pool tables of each class.").

Regarding Claims 2, 8 and 16, Fresko further teaches: wherein the step of matching matches the first data entity with the second data entity if the first string value and second string value are identical (Column 9, Lines 21-23, "A shared constant pool table is created in step 403, with all duplicate constants determined from step 402.").

Regarding Claims 3, 9 and 17, Fresko further teaches: wherein the step of matching matches the first data entity with the second data entity if the second string value contains the first string value (Column 9, Lines 21-23, "A shared constant pool table is created in step 403, with all duplicate constants determined from step 402.").

Regarding Claim 4, 10 and 18 Fresko further teaches: further comprising the steps: reading a third run unit to be added to the executable file, wherein the third run unit contains a third data entity of a third string value (Column 9, Lines 21-23, "A shared constant pool table is created in step 403, with all duplicate constants determined from step 402."); matching the first data entity with the third data entity wherein a match is found if the third string value contains the first string value (Column

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9, Lines 21-23, "A shared constant pool table is created in step 403, with all duplicate constants determined from step 402."); removing the first data entity from the executable file (**Column 9, Lines 23-35, "In step 404, the pre-processor removes the duplicate, shared constants from the individual constant pool tables of each class.");**; and adding the third data entity to the executable file (**Column 9, Lines 23-35, "In step 404, the pre-processor removes the duplicate, shared constants from the individual constant pool tables of each class.");**

Regarding Claims 5, 11 and 19, Fresko further teaches: wherein the step of locating a first data entity comprises the steps of: locating two or more data entities in the first run unit (**Column 9, Lines 17-21, "In step 402, the pre-processor examines the constant pool tables of each class to determine the set of class file constants (such as strings and numerics, as well as others specific to the class file format) that can be shared between classes in "S."");** and creating the first data entity from the two or more data entities (**Column 9, Lines 21-23, "A shared constant pool table is created in step 403, with all duplicate constants determined from step 402.");**

Regarding Claims 6, 12 and 20, Fresko further teaches: wherein the step of locating a data entity locates data entities using a key value by which the data entity is marked (**Column 9, Lines 55-57, "In one embodiment of the invention, a new constant type is defined with a corresponding constant type tag. The new constant type provides as its info[] element an index into the shared constant table.");**

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Regarding Claims 14 and 15, Fresko further teaches: wherein the step of locating two or more data entities locates two or more data entities using a key value by which each of the two or more data entities is marked **(Column 9, Lines 55-57, “In one embodiment of the invention, a new constant type is defined with a corresponding constant type tag. The new constant type provides as its info[] element an index into the shared constant table.”)**.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW J. BROPHY whose telephone number is . The examiner can normally be reached on Monday-Thursday 8:00AM-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on (571) 272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJB

2/11/2008



WEI ZHEN
SUPERVISORY PATENT EXAMINER